

REMARKS**I. INTRODUCTION**

Claims 13 and 14 have been cancelled, without prejudice. Claim 10 has been amended to clarify the exemplary claimed embodiment of the present application recited therein. New claim 26 has been added. Accordingly, claims 10-12 and 15-26 are now under consideration in the above-referenced application. Provided above, please find a claim listing indicating the current amendment to claim 10, cancellation of claims 13 and 14, and the addition of new claim 26.

Applicants respectfully assert that the amendments to claim 10 and the addition of new claim 26 fully comply with the requirements set forth in 37 C.F.R. § 1.121. Support for the claim amendment and new claim can be found in, e.g., the specification. (See, e.g., substitute specification, paras. [0011]-[0013], [0042]-[0043] and [0047]). It is respectfully submitted that no new matter has been added.

II. REJECTION UNDER 35 U.S.C. § 102 SHOULD BE WITHDRAWN

Claims 10-25 stand rejected under 35 U.S.C. § 102(b) as allegedly being unpatentable over U.S. Patent No. 6,465,114 issued to Honda et al. (the "Honda patent").

As an initial matter, Applicants respectfully assert that the Honda patent is not a proper § 102(b) reference for rejecting the claims of the present application. As discussed in an interview between the Examiner and Applicants' representative in early December of 2005, the Honda patent issued on October 15, 2002, which is its effective date as a § 102(b) prior art reference against the claims of the present application. The present application was filed as the national phase of PCT application No. PCT/JP03/00129, having a filing date of January 9, 2003. Therefore, the filing date of the PCT application is also the effective U.S. filing date of the present application, as the U.S. was a designated country in the PCT application. Therefore, the

effective date of the Honda patent for the purposes of § 102(b) (i.e., October 15, 2002) is less than one year from the U.S. filing date of the present application (i.e., January 9, 2003), and thus the Honda patent does not qualify as prior art over the claimed subject matter of the present application under 35 U.S.C. § 102(b). During the interview, the Examiner agreed that the Honda patent is not a § 102(b) reference, but indicated that the Honda patent is now being considered as a reference under 35 U.S.C. § 102(e) with respect to the claims of the present application. Accordingly, Applicants now address the outstanding rejection as being made pursuant to 35 U.S.C. § 102(e). Applicants reserve the right to file a declaration of prior invention under 37 C.F.R. § 1.131, if appropriate, to antedate the cited reference and/or to indicate (if appropriate) whether the inventions in the Honda patent and in the present application were invented by the same inventive entities.

In addition, even if the Honda patent can be considered a proper § 102(e) reference with respect to the claims of this application, it is respectfully asserted that the Honda patent does not contain all elements of the subject matter recited in amended independent claim 10, independent claim 18, and new independent claim 26, and the claims which depend therefrom.

In order for a claim to be rejected as anticipated under 35 U.S.C. § 102, each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference. Manual of Patent Examining Procedures, §2131; *also see Lindeman Maschinenfabrik v. Am Hoist and Derrick*, 730 F.2d 1452, 1458 (Fed. Cir. 1984).

Applicants' invention, as recited in each of amended independent claim 1, independent claim 18, and new independent claim 26 relates to **a hot dip plated steel material that includes a plated layer comprising, *inter alia*, an Al-type intermetallic compound.**

Indeed, it is respectfully asserted that the Honda patent relied on by the Examiner does not disclose **a plated layer comprising an Al-type intermetallic compound**. In particular, the Honda patent relates to a Zn coated steel material in which the coating layer may comprise an Mg intermetallic compound, such as $MgZn_2$. (See, e.g., Honda patent, col. 9, lns. 10-12, and lns. 22-24; and Table 26). However, contrary to the subject matter recited in independent claims 1, 18 and 26, the Honda patent does not disclose the presence of an Al-type intermetallic in the coating layer.

The Examiner apparently admits that such subject matter is absent from the Honda patent, but alleges that “it is *reasonable to expect* the zinc alloy coating system disclosed by Honda et al. to *inherently contain* the same intermetallic compounds and metallurgical structures as claimed by the applicants because Honda, et al. utilizes the same alloying elements, similar alloy elemental weight percent ranges, and routine zinc alloy coating processes as disclosed by the applicants.” (Office Action, p. 2, lns. 22-26, emphasis added). Applicants respectfully disagree.

The Examiner is respectfully reminded that the possibility that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, *the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference*, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. *The mere fact that*

a certain thing may result from a given set of circumstances is not sufficient.’ ” In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). “In relying upon the theory of inherency, *the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows* from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

In the present case, Applicants respectfully assert that there is no intrinsic or extrinsic evidence that supports the Examiner’s contention that the Al-type intermetallics recited in the claims of the present application are present in the coating layer of the Honda patent. The Examiner believes that it would be “reasonable to expect” such intermetallics to be present in the coating layer of the Honda patent, based on an alleged general similarity between the processing and compositions disclosed in the Honda patent and those recited in the specification of the present application. However, the Examiner fails to provide a basis in fact and/or technical reasoning to support the assertion that the allegedly inherent presence of Al-type intermetallics necessarily flows from the disclosures made in the Honda patent. Accordingly, Applicants respectfully assert that the Examiner has not met the burden of establishing the inherency in the Honda patent as allegedly including the above-discussed recitation as the basis for rejecting claims 10-25 of the present application under 35 U.S.C. § 102(e).

Applicants further disagree with the Examiner’s assertion that the present invention and the Honda patent utilize “the same alloying elements, similar elemental weight percent ranges, and routine zinc alloy coating processes...” (Office Action, p. 2, lns. 25-26). For example, the specification of the present application provides explicit information relating to the addition of the claimed Al-type intermetallic compound in a bath (see, e.g., substitute specification, p. 14,

paras. [0044]-[0046]) which is not disclosed in the Honda patent. Accordingly, the Honda patent does not disclose **“the same alloying elements ... and routine zinc alloy coating processes...”** as asserted by the Examiner. (*Id.*)

Further, Applicants respectfully assert that the Honda patent also does not disclose **an Al-type intermetallic compound having a melting point of at least 600° C and lattice constants in the range of about 3Å to 5Å, with the intermetallic compound being about 0.001% to 0.5% by mass of the plated layer**, as recited in amended independent claim 10 and new independent claim 26. The Honda patent also does not disclose **an Al-type intermetallic compound abutting on an Al phase**, as recited in independent claims 18 and 26 of the present application.

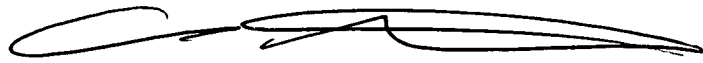
For at least the above reasons, Applicants respectfully assert that the Honda patent fails to disclose the subject matter recited in independent claims 1, 18 and 26, and in the claims depending therefrom, either explicitly or inherently. Therefore, Applicants respectfully assert that the 35 U.S.C. § 102(e) rejection of claims 10-25 should be withdrawn, and respectfully request that a confirmation be provided that pending claims 10-12 and 15-26 are allowable.

III. CONCLUSION

In view of the above, it is respectfully submitted that pending claims 10-12 and 15-26 are in condition for allowance. Prompt consideration, reconsideration and allowance of the present application are therefore earnestly solicited.

Respectfully submitted,

Dated: December 27, 2005



Gary Abelev
Patent Office Reg. No. 40,479

Steven P. Marsh
Patent Office Reg. No. 53,271

DORSEY & WHITNEY, L.L.P.
250 Park Avenue
New York, New York 10177

Attorneys for Applicants
(212) 415-9371